31. (Original) The self-expanding stent of claim 30, wherein the closed circumferential element is radiopaque.

32. (Original) The self-expanding stent of claim 25, wherein the stent is composed of a nickel-titanium alloy.

33. (Currently amended) A self-expanding stent comprising a lattice, wherein the lattice comprises ~~two different types of helices~~ a first and a second helix forming a hollow tube having a longitudinal axis and no free ends, wherein each turn of the first ~~type of~~ helix ~~being formed from~~ comprises a plurality of zigzags,

wherein the second ~~type of~~ helix ~~being formed from~~ comprises a plurality of connection elements in series with the zigzags, wherein there are four connection elements in each ~~360 degree~~ turn of the first ~~type of~~ helix and the first ~~type of~~ and wherein second ~~types of~~ helices proceed circumferentially in opposite directions along the longitudinal axis of the hollow tube.

REMARKS

I. Claim Amendments

The claims 1, 4, 5, 8, 9, 15, 19, 20, 21 25, 28, 29 and 33 have been amended to more clearly define the claimed invention. No new matter has been introduced by these amendments.

II. The claimed invention

The claimed invention is directed to a self-expanding stent comprising a lattice, wherein the lattice comprises two helices having different structures and forming a hollow tube having a longitudinal axis and no free ends. The first helix is a continuous helix (see FIG. 10) and comprises a plurality of turns about the longitudinal axis of the hollow tube. Each turn of the helix comprises a plurality of undulations attached continuously to one another.

The second helix is formed from a plurality of connection elements arranged in series with the undulations of the first helix, and wherein the connection elements connect fewer than all of the undulations of the adjacent turns of the first helix. The first and second helices proceed circumferentially in opposite directions along the longitudinal axis of the hollow tube.

III. Rejection under 35 U.S.C. §102(b)

Claims 1-7, 15-19, 25-27 and 33 have been rejected under 35 U.S.C. § 102(b) as being anticipated by US 5,843,175 to Frantzen ("Frantzen"). Applicants traverse the rejection.

Frantzen does not disclose the claimed invention. The stent in Frantzen is formed of **cylindrical** elements termed struts consisting of bends including at least one troughs and at least one crests. Each cylindrical element in Frantzen is connected to adjacent cylindrical elements by tie bars (see FIGs. 2, 3 and 4, # 50).

As described above, the claimed invention comprises a stent formed by a lattice which comprises two different types of helices forming a hollow tube with no free ends. There is no disclosure in Frantzen that the stent is formed by helices. Therefore, Frantzen does not anticipate the claimed invention. Applicants request that the rejection be withdrawn.

IV. Rejection under 35 U.S.C. §102(e)

Claims 1-5, 7-11, and 14 have been rejected 35 U.S.C. § 102(e) as being anticipated by US 6,348,065 to Brown et al. ("Brown"). Applicants traverse the rejection.

Brown does not disclose the claimed invention. The reference of Brown also discloses a stent made of a plurality of **cylindrical** segments (see FIGs. 2, and 4, #16) connected by an interconnecting element (see FIG. 2, #20). However, there is no disclosure in Brown of a stent comprising two different helices and the manner in which the helices are interconnected to form the claimed stent. Therefore, Brown does not anticipate the claimed invention, and Applicants request that the rejection be withdrawn.

V. Rejections under 35 U.S.C. §103(a)

Claims 12, 13, 15, 20-25, and 28-32 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown (*ibid*) in view of US 6,083,259 to Frantzen. The Examiner alleges that Brown discloses all the limitations of claims 12, 13, 15, 20-25 and 28-32, except for the undulations formed in a zigzag pattern and a radiopaque segment in the transition zone. The Examiner further alleges that Frantzen teaches that undulating segments in a transition zone may have a zigzag pattern as a design alternative to a sinusoidal pattern. According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the references to make the claimed invention. Applicants disagree.

Neither Brown nor Frantzen disclose the claimed stent. None of the cited references discloses a stent formed of a lattice formed by two different types of helices as claimed. The differences between Brown are discussed above under the 102(e) rejection and the same arguments as above apply here. Additionally, there is no teaching or suggestion in Brown that a stent can be made of helices.

The reference of Frantzen also does not disclose the claimed stent. Frantzen aslo does not teach or suggest anything about a stent formed of helices as claimed. Therefore, the cited references, either alone or in combination do not render obvious the claimed invention. Applicants request that the rejection be withdrawn.

Applicants also assert that the references of Lam (US 5,569,295), Huang et al. (US 6,312,459), Rolando et al. (US 6,309,414), Frantzen (US 6,042,606 and US 5,843,164), which were made of record, but not relied upon in rejections, do not render obvious the claimed invention.

CONCLUSION

Applicants submit that the claimed invention has been clearly distinguished over the cited prior art. Applicants respectfully submit that claims 1-33 are in condition for allowance, which action is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fee which may be due in connection with this communication to Deposit Account No. 23-1703.

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Respectfully submitted,

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